U.S. Fish & Wildlife Service

Pesticides and Birds

Catch the Migration Sensation

International Migratory Bird Day is May 8th

Hundreds of species of migratory birds depend on riparian wetlands—narrow strips of land bordering creeks, rivers and other bodies of water—because of the abundant food, water and cover they provide. Riparian wooded areas provide nesting habitat for large numbers of resident and migratory bird species, and during fall migration large numbers of migratory birds use these areas as they make their way south for the winter.

Riparian vegetation helps restore and maintain water quality, acting as a natural filter by removing sediments, nutrients, fertilizers and other pollutants from run off and groundwater before it enters rivers and streams. However, pollution can damage riparian plants and the wetlands on which they depend, reducing their effectiveness as water filters.

The U.S. Fish and Wildlife Service's Environmental Contaminants Program works to prevent contaminants such as pollution from affecting fish and wildlife and their habitats. Through investigations, permit review and habitat restoration, and by working with other federal agencies and state agencies, the Service works to minimize exposure of natural resources to harmful chemicals and pollution on public and private lands, including riparian wetlands.

Serious water pollution problems persist nationwide. As of 1996, according to the Environmental Protection Agency, some 40 percent of the nation's surveyed rivers, lakes, and estuaries were too polluted for basic uses such as fishing and swimming.

Pollution enters our waters in many different ways. Municipal waste disposal, factory discharges, and oil or chemical spills are "point-source" (or "end of the pipe") pollution, which is easier to detect and regulate because we can easily recognize its origin and monitor discharges.

In many cases we cannot clearly determine the origin of pollution. For example, agricultural pesticides, fertilizers, oil, and livestock waste may be carried by runoff and contaminate a stream dozens of miles away. Pollutants also may be carried long distances through the air and deposited on land and water by rain. These are forms of "non-point-source" pollution, which is much more difficult to detect and control.

Homeowners use up to 10 times more chemical pesticides per acre on their lawns than farmers and spend more per acre, on average, to maintain their lawns than farmers spend per acre on crops. This contributes to non-point source pollution in our streams and rivers.

If you use pesticides and other chemicals to maintain your lawn and garden, you can help reduce the amount of pollution reaching our nation's waters by changing the way you care for your yard.

Choose non-chemical weed controls whenever possible, including mechanical and physical controls such as mulching to avoid weed growth, spading, hoeing or pulling up weeds.

Mow frequently and set your lawn mower at 2½ to 3 inches. This encourages a healthier, thicker lawn by providing grass more surface area to take in sunlight and therefore, more energy to extend its root system. This helps grass survive drought, tolerate insect damage, fend off disease, and shade out weeds that are attempting to germinate and grow.

Minimize fertilizer use. Over fertilization is a common problem and excess fertilizer will likely wash into creeks and rivers. Help prevent pollution from fertilizer by taking these actions:

■ Use compost to develop healthy soils and reduce the need for chemical fertilizers.

■ For a reasonable fee your County Cooperative Extension Service can test your soil to find out exactly what nutrients it needs.

■ Watch the weather to make sure that you do not apply fertilizers immediately before a heavy rain.

■ Use organic ("slow-release") fertilizers rather than synthetic ones. Apply fertilizer when the soil is moist and *lightly* water. This will help fertilizer move into the root zone instead of blowing or washing away.

■ Calibrate your applicator to make sure you apply the correct amount of fertilizer.

Reduce your dependence on pesticides:

■ Minimize build up of pests, automatically reducing the need for pesticides, by moving piles of wood away from the house, clearing away litter, garbage and pet droppings, and providing good drainage to prevent standing water that will attract pests such as mosquitoes.

■ Plant native grasses, shrubs and trees (contact your County Cooperative Extension Service for help in identifying native plants). This will help decrease the need for pesticides, fertilizers, and excessive watering because native plants are often hardier than non-native plants and less susceptible to pests and disease.

■ Put an assortment of plants in your yard to increase biological diversity and encourage a variety of beneficial organisms that provide natural pest control.

■ Rotate the plants in your annual garden to reduce pest buildup.

■ Grow plants that are natural insect repellents, such as lemon balm, among your flowers and vegetables to help keep unwanted insects away.

Use selected pesticides and apply them carefully. If you must use a chemical pesticide, use one that is specifically registered for your needs and has the least environmental impact. Apply it in a controlled and localized a manner to help prevent contamination of surrounding areas by aerial drift, runoff or other means. Contact your County Cooperative Extension Service or local nursery for help in identifying pesticides that most closely meet these criteria. *Always closely read and follow* the directions on the product label when applying pesticides. Be aware that many "organic" pesticides may be just as toxic as synthetic pesticides.

Attract Birds. Birds play an important role in pest control. Even leaf-eating birds prefer nutritious insects when building strength for parenthood. In fact, insects are a major part of many songbirds' diets. Attract more birds by:

■ planting native plants that provide ample food, cover and shelter for birds in you area (contact your County Cooperative Extension Service for help in identifying native plants that are beneficial to local birds); and

■ placing a birdbath in the center of your garden (birds can usually find enough food, but often adequate water is hard for them to come by).

Other Suggestions

Here are a few other ways you can help reduce the amount of pollutants entering our waterways:

■ Keep litter, pet wastes, leaves and debris out of street gutters and storm drains—these outlets drain directly into lakes, streams, rivers and wetlands. Pet wastes contain bacteria and viruses that can threaten fish, wildlife and people.

■ Avoid dumping oil, antifreeze or other household chemicals into storm drains or sewers, down a drain or in the toilet. Contact your local Solid Waste Management Office to find out how to dispose of these materials properly.

■ Reduce runoff on your property by minimizing hard surfaces around your home—concrete patios, for example—and increasing the area covered by vegetation that allows water to seep into the ground.

■ Properly install and maintain your septic system. Install your septic system in the right place to avoid high traffic areas and trees. Trampling and tree roots can crack pipes or obstruct flow of wastewater. Also, make sure your septic system is inspected and emptied every 3 to 5 years. Malfunctioning or overflowing septic systems can release bacteria and nutrients into surface and groundwater.

■ Surf the World Wide Web. Several web sites can teach you more about caring for your lawn and garden, backyard wildlife conservation, and reducing nonpoint source pollution. Here are a few to get you started:

The U.S. Fish and Wildlife Service's Environmental Contaminants Program: http://www.fws.gov/r9dec/ecprog.html

The Natural Resource Conservation Service's Backyard Conservation: http://www.nhq.nrcs.usda.gov/CCS/Backyard.html

The Natural Resource Conservation Service's Lawn and Garden Care: http://www.ncg.nrcs.usda.gov/lawn.html

The U.S. EPA's Office of Wetlands, Oceans and Watersheds: http://www.epa.gov/OWOW

The U.S. EPA's Office of Pesticide Programs: http://www.epa.gov/pesticides

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